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## Using E-Portfolio in Vocational Education and Training

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*The article presents the experience of using an e-portfolio technology in the system of vocational education and training in accordance with the requirements of the modern labor market. The article describes the experience of implying this technology in the academic process at the Krasnoyarsk Teacher Training College No.1.*

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### Introduction

The problem of college graduates' employment is topical in many regions of Russia. Young specialists lacking experience at the beginning of their professional career, have little chance to be employed in their field.

According to the Federal Service of State Statistics the rise in teen unemployment (aged 15-19) has made 8.6 % by the end of 2011. The rise in the unemployment of college and university graduates has made 21.9 % (Web-site "City News").

The problem of college graduates' employment is a consequence of the fact that

the Russian system of professional education has no settled relationship with the labor market. This relationship could eliminate the imbalance between supply and demand of experts, between the quality of vocational training and the requirements of the employer.

The successful employment of college graduates is interfered by the absence of mutually advantageous communication between enterprises and vocational education institutions. The enterprises are not interested in retraining young specialists as it demands time and finance, and colleges train their students according to their own possibilities and taking

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into account parents and school graduates' wishes, practically ignoring the labor market tendencies.

Therefore, the system of vocational education and training needs essential changes in terms of its adaptation to the modern economy requirements (Burkova, 2008).

Thus, there is a need to establish an effective mechanism of interaction between the labor market and vocational education institutions in order to eliminate these contradictions.

The implementation of the e-portfolio in the system of vocational education and training can become a link between the college and the employer, a basis for the graduate's future career growth, an estimation tool of the student's professional competence.

On the other hand, the e-portfolio is an effective means of monitoring academic achievements of the student, showing the level of his/her involvement in academic, research, social, creative and other kinds of activity.

#### **Prospects and conditions of effective implementation of the e-portfolio technology in the system of vocational education and training**

The prospects of the e-portfolio implementation in the system of vocational education and training are as follows:

The e-portfolio:

- ✓ contains information on different types of the student's activity, on subjects, courses and practices taken in the course of training;
- ✓ allows to carry out prolonged monitoring of educational programs;
- ✓ reflects the results of the student's individual academic activity, allows to trace and estimate the results of training and individual progress;

- ✓ demonstrates the academic potential and achievements of the college graduate to the employer;
- ✓ allows to trace the academic results during the entire period of training;
- ✓ testifies to the received knowledge, skills and abilities to be put into practice, i.e. about professional competences of the student;
- ✓ meets the interests of the student and the teacher and can become their means of interaction;
- ✓ stimulates the student's academic activity, helps to realize his/her own purposes and possibilities;
- ✓ acts as the proof of the student's involvement into creative, project and research work.

#### **Implementing e-portfolio in teacher training colleges**

A modern teacher should meet both the requirements of the employer and the educational demand of the society. According to the Federal state educational standard of primary general education, a primary school teacher is supposed to achieve the following educational results:

- ✓ ability of the pupils to plan, control and estimate their own educational actions according to the objective;
- ✓ ability to choose the appropriate ways to achieve the result;
- ✓ ability to understand the reason of success/failure of educational activity;
- ✓ ability to act reasonably even in failure situations;
- ✓ initial skills of cognitive and personal reflection.

The basic criterion to assess students' academic results is to consider their personal abilities. The absence of grading during the first and second years at school does not contradict

the standard system of assessment. It also helps to establish good relationship and cooperation of a pupil and a teacher.

In the conditions of ungraded classes the primary school teacher should be able to use the e-portfolio technology (Smolyaninova et al, 2011).

In the current context teacher training is focused on new tendencies in the system of assessment, reflection and the ability to design the educational process. Therefore, the e-portfolio, being an effective tool to develop professional competences, is used in many teacher training colleges: Kamyshlovsk teacher training college, Kemerovo teacher training college, Krasnoyarsk teacher training college No. 1, Minusinsk teacher training college, Samara social-pedagogical college, Northern teacher training college of Sverdlovsk region.

Here we present the experience of the e-portfolio implementation at Krasnoyarsk teacher training college No. 1. At this college the e-portfolio is used as an effective means of qualitative assessment of students' professional competences.

The basic aim of the e-portfolio is to demonstrate students' academic and professional achievements.

The e-portfolio also pursues the following objectives:

- ✓ to support students' educational and professional motivation;
- ✓ to encourage their academic activity and independence at all steps of professional education;
- ✓ to expand the possibilities of study and self-study;
- ✓ to develop reflective skills;
- ✓ to develop study skills (to set purposes, to plan and organize their own educational and professional activity);

The content of the e-portfolio reflects the student's various achievements allowing to assess

his/her readiness to implement professional skills; it shows his/her significant academic results, and allows to monitor his/her individual progress in a wide educational context.

At this college the e-portfolio use is accepted at the administrative level and is regulated by the local normative act. This act

- ✓ reflects basic requirements to the e-portfolio content;
- ✓ presents the detailed structure of the e-portfolio;
- ✓ describes the process of the e-portfolio formation and assessment;
- ✓ presents the criteria of assessment;

Initially the innovative system of assessment by means of the e-portfolio was introduced at the Department of Primary Education. This method of assessment presupposes a personified account of the student's achievements. It is also an instrument of pedagogical support for the student in his/her social and professional development.

The curriculum of the first year at the Department of Primary Education includes the "E-portfolio technology" course. This course helps students to master methodological approaches to the e-portfolio compilation and implementation. Doing this course, students study the possibilities of the e-portfolio for assessment and reflection of a primary school teacher professional activity which they can later apply during their teaching placement at school. Before starting his/her e-portfolio, the student is assigned a password and a login. Today the college web-site contains portfolios which include the following headings: "Greeting", "CV", "Reflection", "Achievements" and "References".

The structure of the e-portfolio has separate sections including materials which show the student's participation in different types of activity:

1. Greeting (photo or video, a paragraph about the author);

2. CV (summary which gives initial information on the student's educational level, his/her personal qualities, a main objective of studying at college);
3. Reflection (an essay on his/her attitudes to the chosen profession, educational and career plans);
4. Achievements (academic achievements and other achievements in the sphere of:
  - *research* (participation in scientific conferences of various levels (federal, regional, municipal and institutional);
  - *self-education* (independent study of disciplines, attending extra-curricular courses);
  - *methodological work* (programs, analysis of available methodical materials, results of the student's teaching placement, methodical materials to lessons, lesson analysis, reflection, out-of-class activities);
  - *social work* (participation in various actions, projects, student initiatives, extra-curricular clubs, hobbies, volunteering);
  - *references* (by teachers, peer-students);
  - *portfolio assessment* (by experts, self-assessment);

"Methodic bank" is a section which includes the results of teaching placement, the best plans of lessons, the results of the exam in the professional module "The organization of extracurricular activities and communication of primary school pupils" etc.

Such materials in the student's e-portfolio will help potential employers to estimate graduates' potential and make the decision on their employment.

The process of compilation and assessment of a first year student's e-portfolio consists of several stages.

Stage 1. At this stage during the first two months of training students study the

introductory course "E-portfolio technology" and get acquainted with the criteria of assessment.

Criteria:

- ✓ Completeness (whether all the sections necessary at this stage, are filled in);
- ✓ Information content (whether the information presented in the e-portfolio shows personal qualities and other characteristics of the student);
- ✓ Quality of materials' layout

Stage 2. Students fill in "Greeting" and "CV" sections. As a rule, the "Greeting" section doesn't cause any difficulties unlike the "CV" section. Therefore, it is advisable to set fields for filling in advance for the "CV" section. In case such fields are absent, we recommend to make up questions, the answers to which will help students to fill in this section.

Stage 3. Students write an essay "My future profession" which is placed in the "Reflection" section. Also, in this section, students present materials reflecting their educational plans for the coming period (a semester, a year). Teachers, mentors and psychologists should give students some advisory support in writing their reflective essays and reports. Such support is especially needed when students write about their professional (career) plans. In this case it is necessary to offer questions, the answers to which will help to reveal student's professional motivation and long-term plans.

For example,

- 1) My aim (long-term) (what I'm going to do, what kind of specialist I'm going to become, where I'm going to work, what position I'm going to take);
- 2) A chain of short-term objectives (what I already know and what I'm going to learn, what I have already achieved, educational and career plans);
- 3) Ways to achieve the objectives (what I'm going to do to achieve them: study

necessary literature, talk to competent people, use my own knowledge and life experience, enroll on a course, etc.);

- 4) External conditions (what kind of difficulties/obstacles I anticipate);
- 5) Internal conditions (abilities for training, persistence, patience, personal qualities necessary for this specialty);
- 6) Backups in case of insuperable difficulties in the plan realization.

Stage 4. Students select materials and place them into the "Achievements" section.

Stage 5. By the end of the academic year the e-portfolio materials are assessed by experts. Students start compiling the e-portfolio during their first year at college and later they develop and improve it.

The content of the e-portfolio must reflect the development of the student's professional competences in accordance with the Federal state educational standard of vocational education and training (Pedagogical education). For this purpose we have devised the scale of assessment of the student's competences presented in the e-portfolio.

The results of the student's academic and professional activity presented in the e-portfolio are the admission to mid-term and final exams.

Generally, the e-portfolio technology

- ✓ allows to estimate the student's success in academic activity both in separate subjects and in the group of disciplines;
- ✓ allows to monitor the student's results, abilities and competences necessary for his/her future professional activity;
- ✓ promotes the student's motivation to improve his/her results;
- ✓ allows to track the student's individual progress in his/her academic and social activity .
- ✓ focuses the student on success in future professional activity and career growth;

- ✓ allows the employer to choose a specialist basing on the objective criteria.

Students independently select the best materials for their e-portfolio, analyzing them and making necessary changes after teachers and experts' assessment. By doing this, students get reflective experience and develop critical thinking which are necessary in modern education.

The e-portfolio is an effective tool which helps students to correlate the process with the results of their study, their claims with their real possibilities, the level of test tasks with their own level. In the long run, the e-portfolio contributes to the effective self-presentation at the labor market.

### Conclusion

The experience of using the e-portfolio in Krasnoyarsk teacher training college No. 1 has shown that further implementation of this technology in the system of vocational education will be successful on condition that:

- a well-defined concept of the e-portfolio technology introduction into the educational process is devised;
- a discipline on the e-portfolio technology is included into the curriculum;
- learner-support and didactic materials on the e-portfolio technology are devised both for teachers and for students;
- a local act carried out on the administrative level regulates the introduction and implementation of the e-portfolio technology;
- an accurate system of the e-portfolio materials ranking is devised;
- their quantitative and qualitative assessment is carried out on the basis of unified criteria.

In our opinion, the wide range of the e-portfolio technology possibilities can be fully

realized in case the consistency of operation is ensured between a college and a university, a college and the labor market. Thus, it is necessary to build up an e-portfolio database which will promote successful employment of college graduates.

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### Web-sites of colleges

Kamyshlovsk teacher training college [http://kampk.ucoz.ru/Dokument/polozhenie\\_o\\_portfolio.doc](http://kampk.ucoz.ru/Dokument/polozhenie_o_portfolio.doc);

Kemerovo teacher training college <http://kempc.edu.ru/index.php/>;

Kirov teacher training college <http://kp-kollege.ru/>;

Krasnoyarsk teacher training college №1 <http://www.kpk1.ru/>

Minusinsk teacher training college <http://www.minuspk.ru/?mode=honor.top>;

Noyabrsk college of professional and information technologies <http://resume.nkit.ru/>

Samara social-pedagogical college <http://samsspc.ru/2009/11/24/portfolio-kak-innovacionnyj-ocenochnyj-instrument.html>;

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## **Использование технологии епортфолио в системе среднего профессионального педагогического образования**

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*Авторами предлагается использование технологии епортфолио для подготовки специалистов в системе среднего педагогического профессионального образования в соответствии с образовательными запросами общества и требованиями современного рынка труда. Представлен опыт использования данной технологии в Красноярском педагогическом колледже №1 им. М. Горького.*

*Ключевые слова: епортфолио, педагогическое образование, профессиональные компетенции, среднее профессиональное образование.*

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